

IN THE CLAIMS

Please amend the claims to read as follows:

Listing of Claims

1-11. (Canceled).

12. (New) A channel estimation apparatus that performs channel estimation using a received signal, the apparatus comprising:

an estimator that performs channel estimation using a pilot signal included in the received signal to obtain a first channel estimation value and performs channel estimation using a data signal included in the received signal to obtain a second channel estimation value;

a calculator that calculates the reliability of a temporary decision value, which is based on the first channel estimation value and the data signal, to produce a weighting coefficient;

a multiplier that multiplies the second channel estimation value by the weighting coefficient to produce a weighted second channel estimation value; and

a combiner that combines the weighted second channel estimation value with the first channel estimation value to obtain a third channel estimation value.

13. (New) The channel estimation apparatus according to claim 12, wherein the weighting coefficient becomes larger as the reliability of the temporary decision value becomes higher and becomes smaller as the reliability of the temporary decision value becomes lower.

14. (New) A radio receiving apparatus comprising:
the channel estimation apparatus according to claim 12;
a complex multiplier that complex-multiplies the data signal by the third channel estimation value; and
a demodulator that demodulates the data signal multiplied by the third channel estimation value.

15. (New) A communication terminal apparatus comprising the radio receiving apparatus according to claim 14.

16. (New) A base station apparatus comprising the radio receiving apparatus according to claim 14.

17. (New) A channel estimation method that performs channel estimation using a received signal, the method comprising:

performing channel estimation using a pilot signal included in the received signal to obtain a first channel estimation value;

performing channel estimation using a data signal included in the received signal to obtain a second channel estimation value;

calculating the reliability of a temporary decision value, which is based on the first channel estimation value and the data signal, to produce a weighting coefficient;

multiplying the second channel estimation value by the weighting coefficient to produce a weighted second channel estimation value; and

combining the weighted second channel estimation value with the first channel estimation value to obtain a third channel estimation value.